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GROUP 2800

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/037,942
Filing Date: January 03, 2002
Appellant(s): SAGNARD ET AL.

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GROUP 2800

The Dow Chemical Property
Intellectual Property
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 3/10/2006 appealing from the Office action mailed 1/10/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal. The previous appeal filed on February 4, 2005 is not considered a related appeal because prosecution was reopened.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,529,824	Walendy et al.	6-1996

5,062,244	Ducharme	11-1991
5,993,932	Friedl et al.	11-1999

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-4,6-11,21,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walendy et al. (5529824) in view of Ducharme (5062244).

As to claim 1, Walendy et al. discloses a building panel comprising at least two panel domains (figure 2 numbers 4,3), wherein each panel domain has an essentially homogeneous strength and an average compressive strengths (col. 3 lines 42-64) wherein the panel has at least two panel domains having different average compressive strengths (col. 3 lines 42-64) is essentially free of a combination of hollow and solid foam strands, a uniform panel thickness (figure 2), fits fully within a cavity defined by cavity walls (col. 3 lines 21-23), and when in the cavity, the building panel has a compressive recovery that supplies sufficient pressure against the cavity walls to frictionally retain the building panel within the cavity (col. lines 27-28) wherein the panel has an edge containing a panel domain extending from a primary face to an opposing face (figure 2).

As to claim 3, Walendy et al. discloses wherein at least one panel domain is a comformable panel domain that when compressed reduces at least one dimension of the panel thereby allowing insertion of the panel into the cavity, wherein the panel has a compressive recovery that causes frictional retention of the panel within the cavity (col. 3 lines 27-28).

As to claim 4, Walendy et al. discloses at least one panel domain that is a conformable panel domain that allows the panel to reversibly bend from a planar to a nonplanar configuration (figure 2 number 4).

As to claim 6, Walendy et al. discloses that the panel has alternating conformable and rigid panel domains (figure 2 number 3,4).

As to claim 7, Walendy et al. discloses that the panel has a perimeter and the perimeter comprises at least one conformable panel domain (figure 2 number 4).

As to claim 8, Walendy et al. discloses a conformable panel along at least one edge (figure 2 number 4).

As to claim 9, Walendy et al. discloses that the panel domains are bands (figure 2 numbers 4,3).

As to claims 11, Walendy et al. discloses that at least one panel domain comprises a polymeric foam (col. 3 lines 43).

As to claim 21, Walendy et al. discloses that at least one edge of the panel is a conformable domain (figure 2 numbers 4).

As to claim 22, Walendy et al. discloses that the panel domains extend through the thickness of the panel (figure 2 number 3,4).

As to claim 1, Walendy et al. fail to disclose that the pressure being 100 Newtons per square meter or more and 200,000 Newton per square meter or less. Walendy et al. discloses a cavity defined by cavity walls that has a compressive recovery that supplies sufficient pressure against the cavity walls to frictionally retain the building panel within the cavity (col. 2 lines 65-66). It would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Walendy et al. with a compressive recovery that supplies sufficient pressure against the cavity walls to frictionally retain the building panel within the cavity, the pressure being 100 Newtons per square meter or more and 200,000 Newton per square meter or less in absence of unexpected results.

Walendy et al. further fails to disclose that the panel has a slit penetrating to a depth less than the panel thickness traverses and severs the primary faces or the face opposing the primary face.

Durcharme teaches that the panel has a slit penetrating to a depth less than the panel thickness traverses and severs the primary faces or the face opposing the primary face (figure 1 number 30 or 31) for the purpose of providing lateral compression over the full height of the insert, thereby enabling the insert to conform to the cores of different sizes and shapes (col. 3 lines 8-11).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Walendy et al. with a slit penetrating to a depth less than the panel thickness traverses the primary faces or the face opposing the primary face in order to provide lateral compression over the full height of

the insert, thereby enabling the insert to conform to the cores of different sizes and shapes (col. 3 lines 8-11) as taught by Durcharme.

As to claim 2, Walendy et al. fail to disclose that at least two domains differ in average compressive strength by at least 5%. Walendy discloses that one of the two panel domains is made of foam and the other panel domain is made of cardboard (col. 3 lines 42-50) therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide at least two domains differ in average compressive strength by at least 5%.

As to claim 10, Walendy fail to disclose that the panel has at least one edge that comprises a tongue or groove profile. Durcharme teaches that the panel has at least one edge that comprises a tongue or groove profile for the purpose of enabling the panel to conform to the cores of different sizes and shapes (col. 4 lines 55-58).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Walendy et al. with a tongue or groove profile in order to enable the panel to conform to the cores of different sizes and shapes (col. 4 lines 55-58) as taught by Durcharme.

2. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walendy et al. in view of Durcharme and in further view of Friedl et al. (5993932).

Walendy and Durcharme discloses the panel described above. Walendy fail to disclose that each of the panel domain comprises a polymeric foam. Friedl et al. teaches that each of the panel domains comprises polymeric foam for the purpose of to

reduce the dimensioning of the thermal insulating layer in vehicle interiors thus achieving material and cost saving (col. 3 lines 13-16).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Walendy with each of the panel domains comprises polymeric foam in order to reduce the dimensioning of the thermal insulating layer in vehicle interiors thus achieving material and cost saving (col. 3 lines 13-16) as taught by Friedl et al.

3. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walendy et al. in view of Durcharme and in further view of Grinshpun et al. (6226943).

Walendy et al. and Durcharme discloses the panel described above. Walendy et al. fail to disclose that at least one panel domain has an open cell content of 5 percent or 50 percent or more according to American Society for Testing and Materials method D2856A . Grinshpun et al. teaches disclose that at least one panel domain has an open cell content of 5 percent or 50 percent or more according to American Society for Testing and Materials method D2856A (col. 5 lines 42-48) for the purpose of obtaining desired insulating properties of the foam (col. 5 lines 54-55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Walendy et al. with at least one panel domain has an open cell content of 5 percent or 50 percent or more according to American Society for Testing and Materials method D2856A in order to obtain desired insulating properties of the foam (col. 5 lines 54-55).

4. Claims 16-17,19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walendy et al. in view of Durcharme and in further view of Park (WO0015697).

Walendy et al. and Durcharme discloses the panel described above. Walendy et al. fail to disclose that at least one panel domain comprises coalesced polymeric foam strands and wherein the foam strands comprise polypropylene. Walendy et al. fail to disclose that at least one panel domain comprises coalesced polymeric foam strands having interstrand spaces. Walendy et al. fail to disclose foam's average cell diameter within the range of 0.01 to 10mm.

Park teaches coalesced polymeric foam strands that comprise polypropylene (page 4 line 12) and have interstrand spaces (page 9 line 30), an open cell content of 84 percent with diameter of .4mm (page 21 lines 26-29) for the purpose providing sound deadening properties satisfactory for demanding applications which have mechanical strength, which are economical to manufacture and which are hydrolytically stable.

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Walendy et al. with coalesced polymeric foam strands that comprise polypropylene and have interstrand spaces, an open cell content of 84 percent with diameter of .4mm in order to provide sound deadening properties satisfactory for demanding applications which have mechanical strength, which are economical to manufacture and which are hydrolytically stable (page 2 lines 19-21) as taught by Park.

Allowable Subject Matter

5. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art fail to disclose or suggest at least one panel domain that comprise coalesced polymeric foam strands having interstrand spaces.

(10) Response to Argument

Appellant argues that Walendy et al. and Ducharme do not teach or suggest to one of ordinary skill in the art a slit that penetrates to a depth less than the panel thickness that traverses and severs a primary face of the panel. Appellant further defines "primary face", "thickness", "sever", and "penetrate" to further argue that Ducharme fail to provide a slit that penetrates to a depth less than the panel thickness that traverses and severs a primary face of the panel.

Walendy et al. discloses a building panel comprising at least two panel domains (figure 2 numbers 4,3), wherein each panel domain has an essentially homogeneous strength and an average compressive strengths (col. 3 lines 42-64) wherein the panel has at least two panel domains having different average compressive strengths (col. 3 lines 42-64) is essentially free of a combination of hollow and solid foam strands, a uniform panel thickness (figure 2), fits fully within a cavity defined by cavity walls (col. 3 lines 21-23), and when in the cavity, the building panel has a compressive recovery that supplies sufficient pressure against the cavity walls to frictionally retain the building

panel within the cavity (col. lines 27-28) wherein the panel has an edge containing a panel domain extending from a primary face to an opposing face (figure 2).

Walendy et al. fail to disclose a slit that penetrates to a depth less than the panel thickness that traverses and severs a primary face of the panel. Ducharme teaches that the panel has a slit penetrating to a depth less than the panel thickness traverses and severs the primary faces or the face opposing the primary face for the purpose of providing lateral compression over the full height of the insert, thereby enabling the insert to conform to the cores of different sizes and shapes (col. 3 lines 8-11).

Appellant defines the following words below.

Primary Face of a Panel - a face having a surface area equal to the highest surface area face of the panel. see, page 4, lines 18-22 of the present Application).

Thickness of a Panel - a perpendicular distance between a primary face and its opposing face. (see, page 4, lines 33-34 of the present Application).

Sever - To DIVIDE i.e., separate into two parts) or SEPARATE (i.e., to set or keep apart).

Penetrate -- to pass into or through b : to enter by overcoming resistance : PIERCE i.e., to run into or make a hole through) c : to gain entrance to.

According to the definition of primary face wherein the face having a surface area equal to the highest surface area face of the panel, Ducharme teaches that the primary

face is number 16 in figure 1 or in figure 2. Ducharme teaches slits on every side of the panel (figure 1 and figure 2 numbers 24,26,28,29,30,31) for the purpose of providing lateral compression over the full height of the insert, thereby enabling the insert to conform to the cores of different sizes and shapes (col. 3 lines 8-11). Therefore, Ducharme teaches a slit that penetrates to a depth less than the panel thickness that traverses and severs a primary face of the panel. In particular, slits 30 and 31, penetrates to a depth less than the panel thickness that traverses and severs a primary face of the panel.

Appellant argues that Ducharme must provide a slit in a panel that severs a primary face of the panel, ie. Divides or separates into two sections, a face of the panel having the highest surface area and penetrates to a depth less than the thickness of the panel, i.e. pass into or create a hole through that primary face or face opposing the primary face to a depth less than the perpendicular distance between a face of the panel having the highest surface area and its opposing face.

Ducharme does provide a slit that severs a primary face in figure 2 numbers 30 and 31. The slits 30 and 31 creates separation in the primary face considering that the primary face is no longer a smooth plane, and by definition a slit is defined as a long narrow opening therefore, the slits severs a primary face. Furthermore, the slits 30 and 31 passes through that primary face or face opposing the primary face to a depth less than the perpendicular distance between a face of the panel having the highest surface area and its opposing face. Since the slit is defined as a long narrow opening, the slits passes through the primary face and because the slits do not pass entirely through the

primary face, the slits passes through the primary face to a depth less than the perpendicular distance between the primary face and its opposing face.

Appellant argues that Walendy or Ducharme fail to teach or suggest a slit that facilitates bending of a building panel into a non planar configuration.

In response to applicant's argument that the slit must facilitate bending of the panel into a non-planar configuration, the slit does not have to facilitate bending of the panel into a non planar configuration. First of all, the asserted functional definition provided by the applicant, "such slits facilitate bending a building panel into a non-planar configuration" does not connote that the "slits *must* facilitate bending of the panel into a non-planar configuration. The slits just increase the likelihood of bending the panel into a non-planar configuration and not positively bend the panel into a non-planar configuration. Secondly, *the limitation that the slits facilitate bending a building panel into a non-planar configuration is not addressed in claims therefore, the slits do not have to bend the panel into a non-planar configuration.*

Appellant argues that neither Walendy et al. nor Ducharme teach or suggest the necessary slit and Walendy fails to disclose at least two panel domains that extend through the thickness of the panel.

As discussed above, Ducharme does indeed teach the necessary slit claimed in claim 1. As to the at least two panel domains that extend through the thickness of the panel, Walendy et al. does teach at least two panel domains that extend through the thickness of the panel, figure 2 number 3 and 4. Appellant did not claim that the panels had to extend entirely through the thickness of the panel.

Appellant argues that it is illogical to think that claim 22 does not mean for the panel domains to extend entirely through the thickness of the panel because claim 22 does not narrow claim 1 in any way. Claim 1, states "the panel has an edge containing *a* panel domain extending from a primary face to an opposing face at that edge..." Claim 22 states "wherein the panel domains extend through the thickness of the panel." In claim 1, appellant discusses one panel domain wherein claim 22, appellant discusses two panel domains. Claim 22, did not claim that the panel domains had to extend entirely through the thickness of the panel. Walendy et al. teaches that the panel domains extend through the thickness of the panel in figure 2 numbers 3 and 4. If appellant desired for the panel domains to extend entirely through the thickness of the panel then the claims should have been amended for both panels to extend from a primary face to an opposing face.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jane Rhee

May 24,2006

Conferees:

PATRICK JOSEPH RYAN
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